

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Schottky barrier rectifier
- Guardring protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance

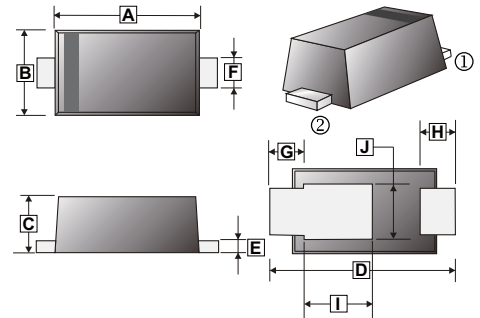
MECHANICAL DATA

- Case: SOD-123T molded plastic body
- Polarity: Color band denotes cathode end
- Mounting position: Any

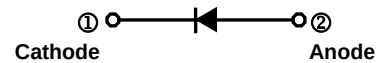
MARKING

Part Number	Marking
SM14T	S4
SM16T	S6
SM110T	SA

SOD-123T



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.60	3.00	F	0.70	1.15
B	1.70	2.10	G	0.80	Typ.
C	0.90	1.35	H	0.30	0.90
D	3.45	3.95	I	1.2	Typ.
E	0.20	Typ.	J	0.85	1.15



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123T	2.5K	7 inch

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified.)

Parameter		Symbol	Part Number			Unit
			SM14T	SM16T	SM110T	
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	40	60	100	V
Maximum RMS Voltage		V _{RMS}	28	42	70	V
Maximum Reverse Voltage		V _R	40	60	100	V
Maximum Forward Voltage@ I _{FM} =1A ¹		V _F	0.50	0.75	0.85	V
Maximum Forward Rectified Current @ T _L =90°C		I _{F(AV)}	1			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	40			A
Maximum Reverse Current	T _J =25°C	I _R	0.2		0.5	mA
	T _J =125°C		6	5		
Maximum Thermal Resistance		R _{θJL}	28			°C/W
Operating & Storage Temperature Range		T _J , T _{STG}	-55~125, -55~150			°C

Note:

1. Pulse test : Pulse width 300 μs , duty cycle 1%

CHARACTERISTIC CURVES

FIG.1 – FORWARD DERATING CURVE

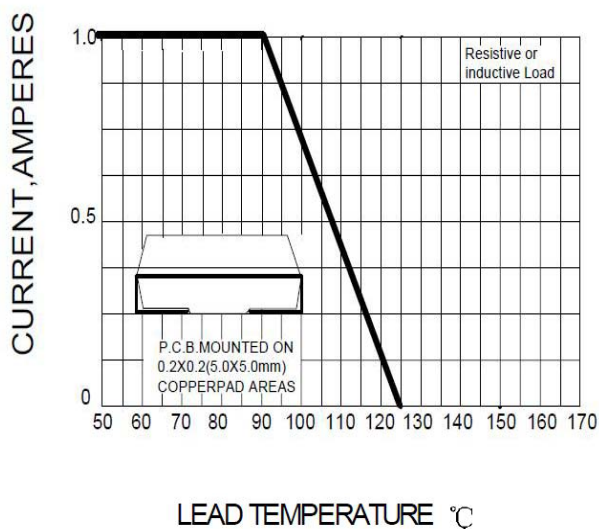


FIG.2– PEAK FORWARD SURGE CURRENT

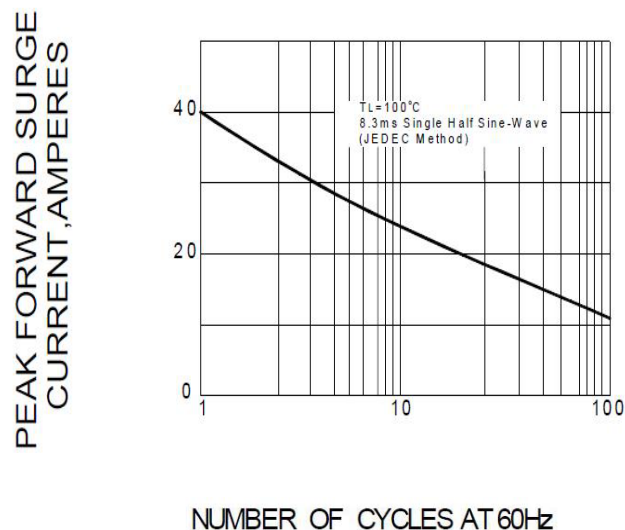


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

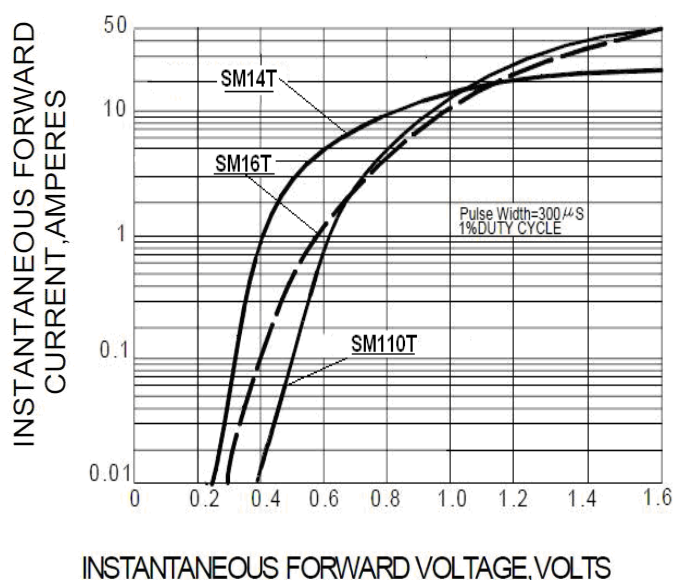


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

